INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/001645

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.7 HO1L 33/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. H01L 33/00 H01S 5/00-5/50

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Published examined utility model applications of Japan 1922-1995
Published unexamined utility model applications of Japan 1971-2005
Registered utility model specifications of Japan 1996-2005
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|---|---|-----------------------|
| Category* | Citation of document, with indication, where appropriate, of the relevant passages | | Relevant to claim No. |
| Υ . | JP 10-145002 A (Nichia Corp 1998.05.29, see whole docur | | 1-17 |
| Y | US 6121634 A (Kabushiki Ka 2000.09.19, see whole docur &JP 10-294532 A | | 1-17 |
| Y . | JP 2003-133589 A (Mitsubishi Cable industri 2003.05.09, see abstract, ((No family) | | 1-17 |
| Y | US 6121636 A (Sony Corpora 2000.09.19, see abstract, 6 &JP 10-308532 | | 1-17 |
| Further documents are listed in the continuation of Box C. See patent family annex. | | | |
| * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance carlier application or patent but published on or after the international filing date "L" attention and filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family | | | |
| Date of the | actual completion of the international search 27.04.2005 | Date of mailing of the international se | 17. 5. 2005 |

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